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Necchi

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MODEL BU

INSTRUCTION
AND MAINTENANCE GUIDE

NECCHI SEWING MACHINE SALES CORP.
164 West 25 Street
New York 1, N. Y.

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As the purchaser of a NECCHI, the world's finest sewing machine, you are entitled to the world's finest service. You are certain of receiving it, if you get into the habit of doing business only with authorized NECCHI dealers, all of whom prominently display the NECCHI Sewing Circle insignia somewhere in their store or department.

It is only through authorized NECCHI dealers that you can be sure of obtaining the satisfaction to which you are entitled, as well as the assurance of prompt, courteous service, and replacement of defective or worn out parts as covered by NECCHI's guarantee bond which accompanies each machine sold. It is especially important that only authorized NECCHI dealers be called in to adjust or repair your machine on the infrequent occasions when such repairs or adjustments may be needed.

Furthermore, authorized NECCHI dealers carry in stock for your convenience a complete line of sewing supplies, including NECCHI oil, needles, belts, bobbins, and other parts and accessories.

Necchi Sewing Machine Sales Corp.

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Foreword

You and your Necchi machine

YOUR NECCHI Model BU sewing machine is suitable for home sewing, professional dress-making, and instructional purposes in schools. IT PERFORMS THE OPERATIONS OF ELEVEN INDIVIDUAL MACHINES.

The machine is equipped with:

1. Instant Control for forward and reverse sewing.
2. Simple Drop Feed Adjustment, to permit darning and embroidering.
3. Floating Presser Foot, to permit sewing over pins and seams, thus eliminating tedious basting.
4. Self-releasing Bobbin Winder.
5. Double Spool Pins, to permit bobbin winding while machine is in operation.
6. Snap-out Race, for easy cleaning.
7. Exclusive Ball-Bearing Oilers, to prevent oil holes from getting clogged with lint and dust.
8. Numerically Calibrated Thread Tension, to make adjustment of thread tension simpler and to prevent thread breakage.
9. Exclusive Third Level of Presser Bar to make darning or embroidery work easier, by allowing the presser foot to be raised without releasing tension. This level, which is marked "Ricamo" (Italian for "Embroidery") on the back of the face plate, is in addition to the customary two levels which are found on ordinary machines.
10. Exclusive Calibrated Presser Bar Regulator to eliminate all guess-work as to proper pressure for various materials.
11. Exclusive Drop-on Needle Plate, constructed of case-hardened steel, which is quickly removed by lifting from posts. It is not necessary to constantly remove screws to free needle plate.
12. Paralleled Feed Dog to assure straight sewing with little guiding, because of even grip on both sides of feed dog.
13. Sliding Plate Cover, simple to open, and impossible to remove accidentally, thus avoiding danger of losing or misplacing.

The NECCHI "BU" sewing machine has a small, powerful electric motor, attached by means of a bracket to the back of the arm. The motor (universal) can be operated on alternating current (AC) or direct current (DC), and drives the machine by means of a belt. Speed is regulated by a knee control or foot control, depending on the user's preference.

To use your NECCHI machine most efficiently, read the following simple instructions carefully and study the illustrations to which reference is made. By following these instructions you will, step by step, prepare the machine for sewing.

Fig. 21 STANDARD ACCESSORIES

List of Standard Accessories

1. Straight Stitch Needle Plate
2. Zig-zag Stitch Needle Plate (on machine)
3. Darning Needle Plate
4. Zig-zag Stitch Cording Foot
5. Zig-zag Stitch Hinged Foot (on machine)
6. Straight Stitch Narrow Hemmer
7. Zig-zag Stitch Narrow Hemmer
8. Button-sewing Foot
9. Straight Stitch Hinged Foot
10. Buttonhole Foot
11. Darning Foot
12. Ruffler and Pleater
13. Multiple Slotted Binder
14. Adjustable Cloth Stitching Guide and Thumb Screw
15. Adjustable Quilting Stitching Guide
16. 3/8" Knife
17. 9/16" Knife
18. 3/4" Knife
19. Knife Handle
20. 4" Screw Driver
21. 2½" Screw Driver
22. Black Latch Bobbin Case (with tension pre-set for making pearl stitch buttonholes)
23. Bobbins
24. Package of Needles
25. Oil Can

Recommended Needle and Thread Sizes

(NECCHI machines use 15 x 1 needles)

Types of Fabrics and Classes of Work	Size of Thread			Sizes of Needles (Grades)
	Cotton	Silk	Mercerized	
Very thin fabrics like Muslin, Georgette, Chiffon, Batiste, fine Linens, Cambrics, etc. For lingerie, infants' wear and delicate lace work.	100 to 150	00 and 000 Twist	00 and 000	9 (Fine)
Light-weight, Shirting and Summertime Fabrics, Linens, fine Silk Goods and Calicoes. For children's and house dresses, washable cotton dresses, aprons and curtains.	80 to 100	0 Twist	50 to 00	11 (Medium-Fine)
Shirtings, Sheetings, Calicoes, Dress Silks and Cottons, light weight woolens, draperies, etc. For general household sewing and all classes of general work.	60 to 80	A&B Twist	50	14 (Medium)
Heavy Calicoes and Silk, light weight Woolens, heavy Cretonnes, Madras, Muslin, Brocades and Quilts. For men's work shirts, smocks and aprons, quilting and fabric furnishings.	40 to 60	C Twist	Heavy Duty	16 (Light-Heavy)
Bed Tickings, Upholstery and Awning Materials, Slip Cover Fabrics, Woolen Goods, heavy woven Coating, light weight Canvas. For trousers, boys' clothing, work uniforms, awnings, slip covers and mattresses.	30 to 40	D Twist	Heavy Duty	18 (Medium-Heavy)
Heavy Tickings and Woolens, Heavy woven Suiting and Coating, Canvas and Sacking. For heavy clothing in general, such as heavy uniforms, coats, trousers, etc., for bedding supplies, bags, etc.	24 to 30	E Twist	40 to 60	19 (Heavy)
For heavy goods, coarse cloths, Canvas, Bags, etc.	Very Coarse		40 to 60	21 (Extra-Heavy)

Guarantee Bond

NECCHI SEWING MACHINE SALES CORP. guarantees against defects or breakage resulting from imperfections in manufacture, without time limit, all parts (except needles, belts, pulleys, and electrical equipment) entering into the manufacture and assembly of the sewing machine which this Bond accompanies provided said sewing machine is used only for family sewing and is given reasonably good care in accordance with the accompanying printed instructions.

Any part, other than those excepted in the preceding paragraph and except lamp bulbs, which is found to be defective will be replaced without charge if returned.

The motor is guaranteed for a period of one (1) year from date of this Bond, and will be replaced without charge if returned within its guarantee period.

This guarantee is extended only to the original purchaser of this machine when new and when purchased from an authorized NECCHI dealer.

NECCHI SEWING MACHINE SALES CORP.

New York 1, New York

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GENERAL INSTRUCTIONS

IMPORTANT

After unpacking, and before using the sewing machine, clean it thoroughly and oil it with a good quality, light sewing machine oil, in accordance with General Instruction No. 2.

1. TO INSURE PERFECT FUNCTIONING OF MACHINE

a. Balance Wheel must *always* be turned *toward* the operator, whether rotated by hand, treadle, or motor.

b. Do not operate machine with presser foot resting on feed dog, unless there is cloth underneath presser foot.

c. Do not try to help feeding, by pulling fabric, since this action will bend needle. The machine automatically feeds the fabric without assistance.

d. Keep slide plate closed when operating machine.

e. Keep a small piece of cloth underneath presser foot whenever machine is not in use. This will prevent damage to feed dog and presser foot.

f. Do not operate sewing machine when presser foot lever is raised.

2. TO OIL THE MACHINE

Use good quality, light machine oil, as recommended by your NECCHI dealer.

To insure easy and trouble-free running, the machine requires oiling. If used continuously, it should be

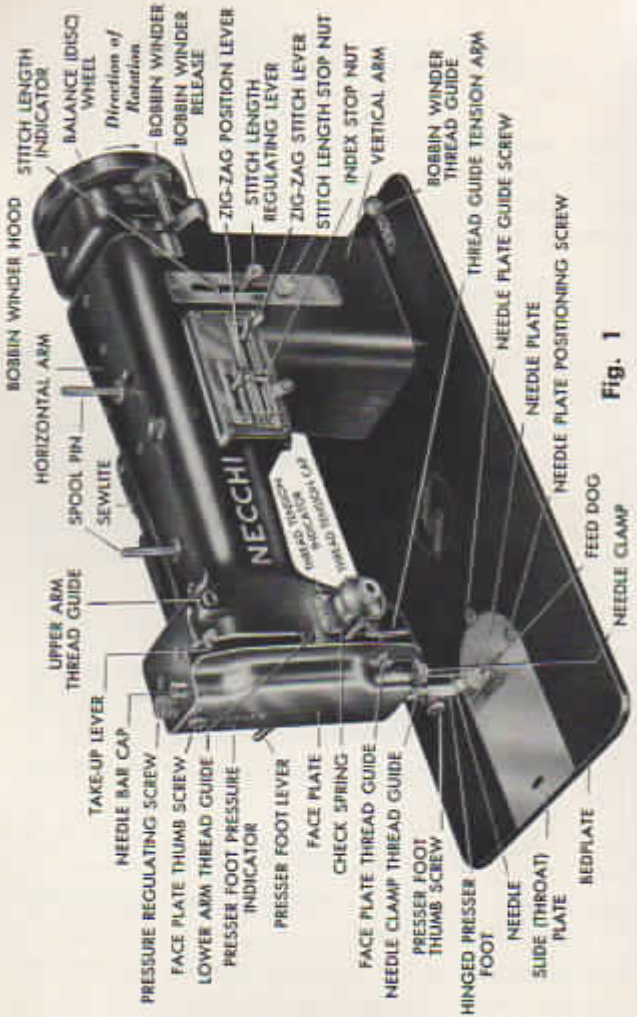


Fig. 1

Fig. 2

oiled every day. For intermittent use (once or twice a week), oil it about once a week. It is not necessary to flood the machine with oil. If oiled regularly, one or two drops of oil in each oil hole will suffice.

a. The arrows in Fig. 2 indicate the small oil holes into which one drop of oil should be put whenever the machine is used.

b. Remove face plate thumb screw (Fig. 1), near upper portion of face plate, remove face plate, and put one drop of oil into each of the oil holes and joints. Replace face plate and tighten thumb screw.

c. Tilt the machine back on its hinges, so that the underside is accessible, and apply a drop of oil to all oiling points indicated in Fig. 3 by arrows.

d. When the machine is in continuous use, it is advis-

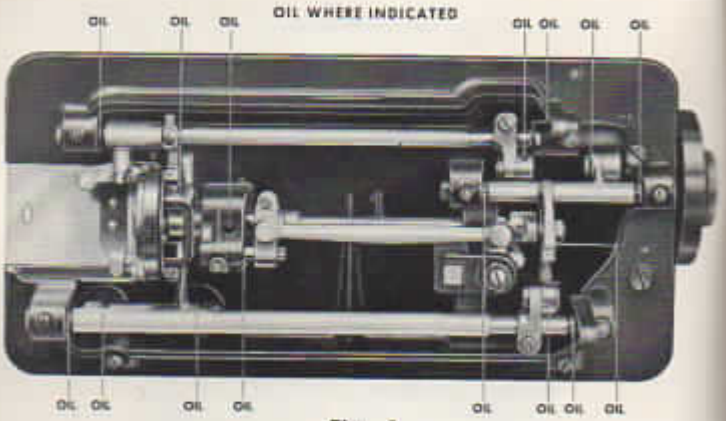


Fig. 3

able to remove the race plate and the hook (shuttle) occasionally. (See General Instruction No. 18 on page 29.) To clean and oil the shuttle bed, use an oil-soaked rag. In replacing, oil the *rim only* of the hook (shuttle).

3. TO CONNECT MACHINE TO ELECTRIC SERVICE

Caution: Make certain that the voltage of your electrical system (power line) is within ten volts of the voltage listed on your motor.

Insert electrical plug, which is outside of rear of cabinet, into any wall-type electric receptacle (outlet), as you would do for any other electrical household appliance.

Caution: When you have finished sewing, always disconnect plug from electric outlet.

4. TO INSERT A NEEDLE

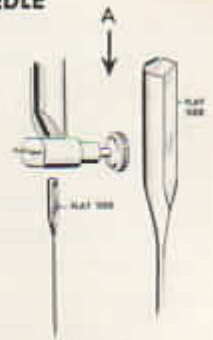


Fig. 4

a. Bring needle to its highest position by turning balance wheel toward you (Fig. 1).

b. Loosen needle clamp by loosening needle clamp screw (A) and insert new needle (with flat side of the needle shank toward the right) into groove of needle bar (Fig. 4).

c. Push needle up into clamp, as far as it will go, then tighten needle clamp screw securely.

Be careful not to bend the needle when inserting it into needle bar.

5. TO CHANGE NEEDLE PLATE

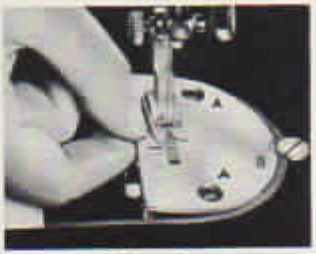


Fig. 5

a. Raise presser foot by raising presser foot lever (Fig. 1, page 14).

b. Move slide plate (Fig. 1, page 14) to extreme left.

c. Lift up needle plate (Fig. 5) and move it to the left, thus freeing it from its locating screws "A".

d. Slide new needle plate toward the right, under screw "B", and place holes in needle plate over top of two locating screws "A" in bed plate.

e. Move slide plate toward the right to close it.

6. TO CHANGE PRESSER FOOT

(See Fig. 1, page 14 for reference.)

a. Bring needle up to its highest position by turning balance wheel toward you.

b. Raise presser foot by raising presser foot lever.

c. Loosen presser foot thumb screw.

d. Move presser foot to the left, as far as thumb screw has been loosened, then, by bringing it down, remove it from the presser foot bar.

e. Slide grooved portion of new presser foot up on presser foot bar, press it against bar and tighten presser foot thumb screw securely.

7. TO DROP FEED DOG

Fig. 6

a. Move slide plate (Fig. 6) to extreme left.
(Note: Illustration is from rear of machine, which makes it appear that slide plate has been moved to right, instead of left.)

b. Press lever "A" (Fig. 6) down, thus lowering and

disconnecting feed dog "B". This will permit you to feed the fabric freely by hand while you are following the embroidery design or monogram outline, or while covering the portion of the article to be darned. The feed dog must also be lowered for sewing on buttons.

8. TO THREAD THE MACHINE

a. Bring needle up to its highest position by turning balance wheel toward you (Fig. 1).

b. Place spool of thread on spool pin "H" and run thread over upper arm thread guide "S". (Fig. 7)

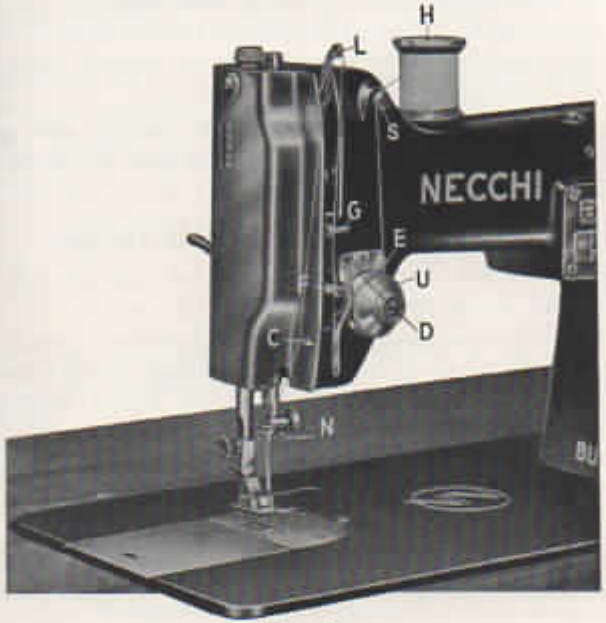


Fig. 7

c. Draw thread down, then insert it from right to left in slot of tension disc housing "U", bringing it up and then down over the thread take-up (check) spring "D".

d. Continue down, under thread guide tension arm "F", and up, in back of lower arm thread guide "G", snapping thread through guide by pulling it far to the left and then toward you.

e. Lead thread upward, and, from right to left, through eye of take-up lever "L".

f. Pull thread down, snapping it through face plate thread guide "C" by pulling thread from back to front, then snapping it from back to front through needle clamp thread guide "N".

g. Pull thread, from left to right, through eye of needle, leaving about four inches of free thread end hanging.

9. TO PREPARE MACHINE FOR SEWING

a. Hold end of needle (upper) thread with left hand so that thread remains loose.

b. With right hand, turn balance wheel slowly toward you until needle goes down and up again to its highest position. This will cause the bobbin (lower) thread to be caught by the needle (upper) thread.

c. Now, by drawing the upper thread by hand, the lower thread will be pulled up through the stitch hole of the needleplate, as shown in Fig. 8.

d. Place the ends of both threads, away from you, underneath the presser foot. Place material between presser foot and needle plate, and lower the presser foot. The machine is now ready for sewing.

Fig. 8

Caution: It is of importance, once the machine is threaded, to make certain that the presser foot is down, and that there is fabric between presser foot and needle plate. Failure to observe this precaution may cause the threads to get tangled underneath the needle plate, jam the hook (shuttle) and damage or break the needle.

10. TO COMMENCE SEWING

a. Place fabric between presser foot and needle plate.

b. Lower presser foot by pushing presser foot lever down.

c. Turn balance wheel toward you until take-up lever is at highest point and set machine in motion by pushing knee control (or stepping on foot control).

d. Hold both threads with left hand, for about three or four stitches, to prevent tangling of the threads, or clogging of the hook (shuttle).

e. You may now proceed with sewing as you see fit.

11. TO TURN A CORNER

a. Slow machine down and stop it while needle is going up, but still has not left the material.

b. Raise presser foot by raising presser foot lever, and revolve material around needle as desired.

c. Lower presser foot and proceed with sewing.

12. TO REMOVE WORK FROM THE MACHINE

a. Turn balance wheel (Fig. 1) toward you until take-up lever reaches its highest position.

b. Raise presser foot by raising presser foot lever to highest level.

c. Draw fabric back (away from you) about four inches.

d. Cut threads and remove material.

13. TO ADJUST THE TENSIONS

a. When tensions of needle (upper) thread and bobbin (lower) thread are properly adjusted, stitches on both sides of fabric will look alike (Fig. 10). Both threads will be locked in the center of the fabric thickness, and no adjustment is necessary.

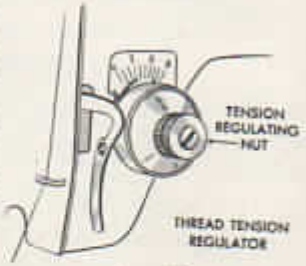


Fig. 9

Fig. 10

b. If tension of needle (upper) thread is too tight, or tension of bobbin (lower) thread is too loose, then needle thread will lie flat on top of fabric and bobbin thread will be pulled up to upper surface, being visible there in form of small knots (Fig. 11).

Fig. 11

To correct this condition, make certain that the presser foot is down, then turn Tension Regulating Nut in front of the Tension Discs (Fig. 9) *to the left.*

Make several stitches to check whether needle (upper) thread tension is correct, and, if necessary, adjust further by turning Regulating Nut.

c. If tension of needle (upper) thread is too loose, or tension of bobbin (lower) thread is too tight, bobbin thread will lie straight along underside of fabric and needle thread will be pulled down to underside, being visible there in form of loops or small knots (Fig. 12). To correct this condition, make certain that the presser foot is down, then turn Tension Regulating Nut in front of Tension Discs, *to the right.*

Fig. 12

Make several stitches to check whether needle (upper) thread tension is correct, and, if necessary, adjust further by turning Regulating Nut.

14. TO WIND THE BOBBIN

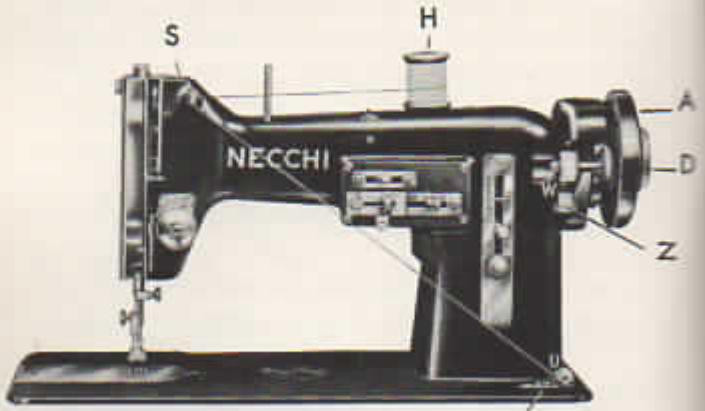


Fig. 13

Important: It is necessary to understand the function of the "Stop Motion" by means of which the balance wheel can be disconnected from the sewing mechanism, when required, thus permitting winding of the bobbin without sewing.

a. Disconnect balance wheel "A" (Fig. 13) from sewing mechanism by holding wheel with left hand and turning stop motion knob "D" toward you with right hand, until knob feels loose.

b. Place spool of thread on pin "H".

c. Draw thread over upper arm thread guide "S", then down under slot of bobbin winder thread guide "U".

d. Wind a few turns of thread by hand on bobbin, from front to back.

e. Place bobbin on spindle "W", as far as it will go.

f. Press lever "Z" forward and push knee control, (or step on foot control) running machine at medium speed to fill the bobbin. Bobbin Winder will automatically stop when bobbin is full.

g. To prevent uneven winding of thread on bobbin, loosen screw "V" and move thread guide "U" either from right to left, or from left to right, as required, then tighten screw "V".

h. If bobbin winds too full, without being stopped automatically, force down lever "Z", so that it will reach slightly below the rim of the bobbin.

i. If not sufficient thread is wound on bobbin, force up lever "Z" past natural stopping point, then press it forward and push knee control, running machine at medium speed.

15. TO INSERT BOBBIN INTO BOBBIN CASE

Fig. 14

a. With left hand, hold *bobbin case* between thumb and forefinger in such a way that the slot in the edge of the bobbin case is on top and its open side faces to right, as shown in Fig. 14.

b. Hold *bobbin* between thumb and forefinger of *right hand*, so that thread on top leads from left to right, as shown in Fig. 14.

Fig. 15

c. Insert bobbin into bobbin case, prevent bobbin from turning by holding latch with thumb of left hand, and with right hand pull thread into slot of bobbin case, as shown in Fig. 15; then draw it under the tension spring and up to the end of the tension spring (Fig. 16), leaving about four inches of loose thread.

Fig. 16

16. TO REMOVE THE BOBBIN CASE

Fig. 17

a. Raise presser foot by raising presser foot lever.

b. Bring needle up to its highest position by turning balance wheel toward you.

c. Move slide plate of machine all the way to the left.

d. Lift latch of bobbin case (Fig. 17) with thumb and forefinger of left hand, and remove bobbin case by pulling it toward the left and out of the machine.

e. The bobbin will drop out when the open end of the bobbin case is held downward and the latch is permitted to snap back into place.

17. TO INSERT THE BOBBIN CASE

a. Raise presser foot by raising presser foot lever.

b. Bring needle up to its highest position, by turning balance wheel toward you.

c. Move slide plate of machine all the way to the left.

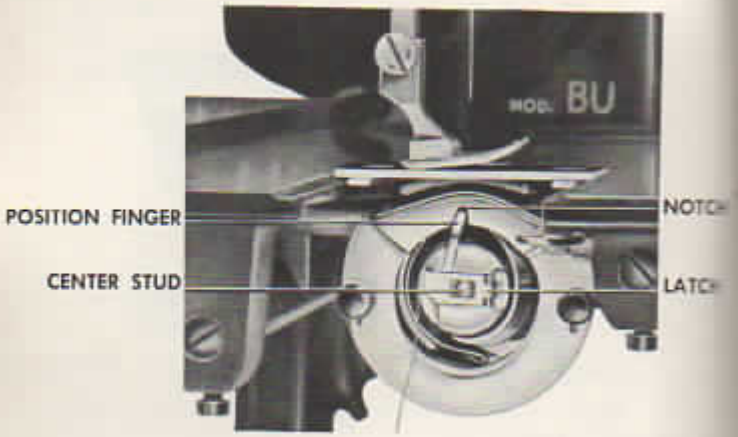


Fig. 18

d. Insert bobbin into bobbin case. (See General Instruction No. 15.)

e. With thumb and forefinger of left hand, take bobbin case (into which the full bobbin has been inserted) by the latch and place it on the center stud of the hook (shuttle). The position finger of the bobbin case must be opposite the notch on top of the race plate, as shown in Fig. 18.

f. Release latch and press bobbin case into hook (shuttle) as far as it will go. Leave about four inches of loose thread hanging down.

g. Push slide plate to right, closing it.

18. TO REMOVE AND REPLACE THE HOOK (SHUTTLE)

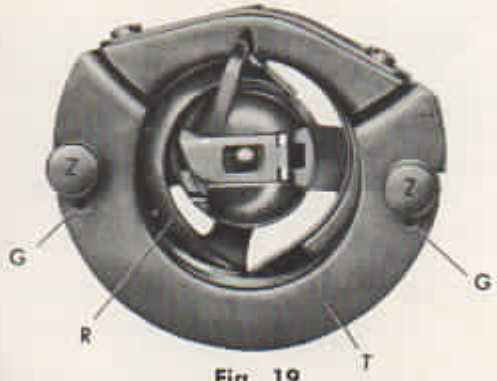


Fig. 19

Should the machine (balance wheel) turn heavily or jam slightly, it may be due to a piece of loose thread which has been caught between hook (shuttle) and race. To correct this condition, proceed carefully as follows:

a. Bring needle up to its highest position by turning balance wheel slowly toward you.

b. Tilt machine back on its hinges, so that underside is in full view.

c. Remove bobbin case (see General Instruction No. 16).

d. Snap out pins "Z" (Figure 19) by spreading them apart, and, with left hand, remove race plate "T" by pulling it away from the race.

e. Remove hook (shuttle) "R" by pulling it to the left with thumb and forefinger of left hand. This leaves the shuttle bed free for cleaning.

f. Remove lint and pieces of thread with a small (paint or pastry) brush, put a drop of oil into the race, and oil *rim only* of hook (shuttle).

g. To replace hook (shuttle), insert it into race with thumb and forefinger of left hand, fitting it into place opposite carrier without force.

h. Fit race plate "T" onto the two small studs "G", and snap pins "Z" back into place.

i. Reinsert bobbin case (see General Instruction No. 17), then lower machine back to working position.

19. TO REGULATE LENGTH OF STITCH

(See Figure 20 for reference.)

a. Release thumb screw "A" by turning it counter-clockwise.

b. Set lever "B" below the zero mark, until indicator "C" moves to desired stitch length on scale. (#1 is the shortest stitch. #4 is the longest. Normal stitch length is #2.)

c. Tighten thumb screw "A" by turning it clockwise. This insures same length of stitch for forward and reverse sewing.

20. TO TACK

("Tack"—A quick backward and forward stitch for reinforcement.)

(See Figure 20 for reference.)

a. Regulate length of stitch (see General Instruction No. 19).

b. Tighten thumb screw "A", thus locking lever "B" between indicators "C" and "D".

Fig. 20

c. Bring lever "B" down as far as lower indicator "D", to sew forward.

d. Raise lever "B" as far as upper indicator "C" to sew in reverse.

21. TO BASTE

a. Bring lever "B" (Fig. 20) down as far as possible.

b. Loosen top tension slightly by setting tension indicator (Figure 9, Page 22) to between zero and #3.

This makes possible a long loose stitch that can be easily removed.

22. TO REGULATE WIDTH OF ZIG-ZAG STITCH

(See Figure 20 for reference.)

Move zig-zag stitch lever "R" along numbered scale to desired width of stitch. If lever "R" fails to move, loosen thumb screw "Q".

Important: Widest stitch is obtained with zig-zag stitch lever "R" at extreme right, and narrowest stitch with zig-zag stitch lever "R" on zero.

23. CAUSES OF COMMON MINOR DIFFICULTIES

Needle (Upper) Thread Breaks

may be due to following reasons:

1. Needle is inserted incorrectly.
2. Needle thread is improperly threaded.
3. Needle thread tension is too tight.
4. Needle thread is of wrong quality for material being used.
5. Needle thread has knots.
6. Needle eye is rough or sharp.
7. Point of needle is damaged (bent over) or blunt.
8. Stitch hole in needle plate is rough or sharp.
9. Needle is too fine for thread in use.
10. Machine is started at full speed.
11. Machine is started with thread take-up lever *not* at highest point.
12. Bobbin case has rough spot due to being hit and damaged by needle.
13. Hook (shuttle) has rough or sharp spot.

Bobbin (Lower) Thread Breaks

may be due to following reasons:

1. Bobbin thread tension is too tight.
2. Bobbin is wound unevenly.

3. Bobbin is too full and binds in bobbin case.
4. Dirt or lint in bobbin case.

Needle Breaks

may be due to following reasons:

1. Pulling fabric to or from you in such a manner that needle strikes needle plate.
2. Insufficient pressure on presser foot.
3. Needle is bent or has blunt point.

Skip Stitches

may be due to following reasons:

1. Needle is inserted incorrectly.
2. Needle is bent or blunt.
3. Thread is too heavy for size of needle.
4. Needle is wrong size for material being used.
5. Insufficient pressure on presser foot.

Uneven Stitches

may be due to following reasons:

1. Presser foot is not resting evenly (fully) upon fabric.
2. Insufficient pressure on presser foot.
3. Feed dog is set too low.
4. Pulling fabric instead of allowing it to be fed by machine.
5. Stitch is too short.
6. Using too fine a needle with too coarse or uneven thread.

Heavy Turning or Jamming of Machine (Balance Wheel)

may be due to a loose piece of thread which has become wedged between hook (shuttle) and race. (See General Instruction No. 18.)

IMPORTANT

It is possible that, after considerable use, some of the parts inside or underneath your machine will get out of adjustment. If, by referring to the aforementioned probable cause, you are not able to bring your machine into working condition and to obtain a perfect seam, *do not try to repair the machine yourself.* Call for your local NECCHI sewing machine dealer. He has excellent facilities and the technical knowledge required to bring your machine to perfect working order.

Useful Sewing Accessories

(Buy these supplies from your Authorized NECCHI Dealer)

Needles—Proper sizes for all types of work (See Recommended Needle and Thread Sizes on Pages 8 and 9)

Needle Threader—For effortless and quick threading.

Scissors—Assorted sizes for various uses.

Sewing Bench—Comfortable to sit on. Should have compartment to hold sewing supplies.

Thimbles—For protection of fingers and speedy sewing. Available in various sizes.

Tape Measures—Made of durable material, in different colors, with distinct numerals.

Tracing Wheels—For quick tracing of patterns. Available also with needle point wheels.

Skirt Marker—For easy marking of hems.

Electric Bulbs—To be certain your sewing machine light is always in good order.

Oil—Only first quality special oil should be used for your sewing machine (no heavier oil than No. 20).

Brush—Soft (pastry) brush for removing dust, lint and threads from your machine.

Pinking Shears—Gives neat inside finish and prevents raveling of edge of material.

Press Cloth—To aid in pressing seams and finished garments.

Press Mitt—To aid in pressing shoulder seams and inaccessible seams.

Sleeve Board—To simplify the operation of pressing sleeves and collars.

OPERATING INSTRUCTIONS

Every NECCHI Model BU machine is furnished with a Master Zig-zag Stitch Needle Plate and Ziz-zag Stitch Hinged Foot, with which the user of the machine can perform:

a. Straight Stitching.
b. Ziz-zag Stitching.
c. Fancy and Embroidery Sewing, Appliqueing, and Monogramming.
d. Button Sewing.
e. Buttonhole Making.
f. Hemming
g. Blindstitching.

Special accessories are furnished with the machine. It is advisable to use the appropriate one when steady, continual work along any of these special lines is to be done. (See pages 6 and 7.) For the sake of simplicity, this book assumes that when the user approaches the machine to perform a particular sewing operation, the zig-zag stitch needle plate and zig-zag stitch hinged foot are in place.

Should one, however, wish to do *straight stitching* only, the aforementioned needle plate and presser foot can be replaced with a Straight Stitch Needle Plate and Straight Stitch Hinged Foot, which are also furnished with the machine. In such cases the position lever "P" (see figure 22) should be set in left notch.

• • • • • •

1. STRAIGHT STITCH

To Prepare Machine

1. Set position lever "P" (Figure 22) in left notch.
2. Regulate length of stitch (see General Instruction No. 19, Page 30).
3. Loosen thumb screw "Q" and move it and zig-zag stitch lever "R" and index "I" to extreme left.

Fig. 22

4. Tighten thumb screw "Q", making it impossible to move zig-zag stitch lever "R".
5. Commence sewing (see General Instruction No. 10, Page 21).

2. ZIG-ZAG STITCH

(See Figure 22 for reference.)

To Prepare Machine

1. Set position lever "P" in center notch.
2. Regulate length of stitch (see General Instruction No. 19, Page 30).
3. Regulate width of zig-zag stitch (see General Instruction No. 22, Page 32).
4. Commence sewing (see General Instruction No. 10, Page 21).

3. EMBROIDERY

a. **To make "satin" stitch (Figure A):**

1. Set position lever "P" in center notch (Figure 22).
2. Set lever "B" (Figure 22) as close to zero mark as possible, and still allow the material to feed.
3. Set zig-zag stitch lever "R" (Figure 22) for desired stitch width.
4. Loosen top tension by turning tension indicator (Figure 9) toward zero.
5. Commence sewing. (See General Instruction No. 10.) This produces a "satin" stitch, which is the basis for all straight running embroidery designs.

b. **To make design (Figure B):**

1. Set position lever "P" in center notch (Figure 22).
2. Set lever "B" for "satin" stitch (Figure A).
3. Commence sewing, and quickly move zig-zag stitch lever "R" from zero to #4, and back to zero again. Repeat operation as long as desired. The length of design depends on the speed at which the zig-zag stitch lever "R" is operated.

c. **To make design (Figure C):**

1. Set position lever "P" in center notch (Figure 22).
2. Set lever "B" for "satin" stitch (Figure A).
3. Commence sewing, and move zig-zag stitch lever "R" slowly from zero to #4, then quickly flip lever back to zero and repeat operation. The length of design is controlled by the speed at which the zig-zag stitch lever "R" is operated.

d. **To make design (Figure D):**

1. Set zig-zag stitch lever "R" between zero and #1 (Figure 22).
2. Set lever "B" for "satin" stitch (Figure A).
3. Commence sewing, and shift position lever "P" from left notch to right notch, and back to the left notch continuously and smoothly, by-passing the center notch entirely. Length of design is controlled by the speed at which the position lever "P" is operated.

e. **To make design (Figure E):**

1. Set position lever "P" in center notch (Figure 22).
2. Set lever "B" for "satin" stitch (Figure A).
3. Commence sewing, and move zig-zag stitch

lever "R" slowly from zero up to #4 and back to zero. Continue operation in even rhythm. Length of design is controlled by speed at which zig-zag stitch lever is operated.

f. **To make design (Figure F):**

1. Set lever "B" for "satin" stitch (Figure 22).
2. Set position lever "P" (Figure 20) in left notch.
3. Set zig-zag stitch lever "R" (Figure 22) between 0-1.
4. Commence sewing and move position lever "P" from the left notch to the center notch, to the right notch. Leave position lever "P" in right notch.
5. While machine is still in operation, switch zig-zag stitch lever "R" to #4. Sew at this position for desired length, then switch zig-zag stitch lever "R" back to between zero and 1.
6. Repeat operation, by moving position lever "P" from right notch to center to left notch.

g. **To make design (Figure G):**

1. Set lever "B" for "satin" stitch (Figure 22).
2. Set zig-zag stitch lever "R" at #1 (Figure 22).
3. Set position lever pin in left notch.
4. Commence sewing, and move position lever "P" to center notch, to right notch, and back again, using all three notches. Length of design is

controlled by the speed at which the position lever is operated, and the time during which it is allowed to remain in each notch.

h. **To make design (Figure H):**

1. Set position lever "P" in center notch (Figure 22).
2. Set lever "B" for "satin" stitch (Figure A).
3. Set zig-zag stitch lever "R" at zero (Figure 22).
4. Commence sewing to desired length, then flip zig-zag stitch lever "R" to #4. Stitch desired length, then flip zig-zag stitch lever "R" back to zero. Repeat operation. Length of design is controlled by length of time that machine is allowed to stitch at each setting of zig-zag stitch lever "R".

The above instructions show how to make a few of the many different designs that NECCHI Model BU can make, easily, effortlessly, and with little practice on the part of the seamstress, by using a combination of the zig-zag stitch lever and the position lever. After practice with the levers, you will be making your own individual designs.

4. EMBROIDERY WITH DROPPED FEED

Note: Silk or mercerized thread is generally used for this type of work.

To Prepare Machine

1. Remove presser foot (see General Instruction No. 6, Page 18).

2. Set position lever "P" in center notch (Figure 22).
3. Regulate width of zig-zag stitch (see General Instruction No. 22, Page 32).
4. Drop feed dog (see General Instruction No. 7, Page 18).
5. Put design to be embroidered in hoop.
6. Place fabric and hoop under needle.
7. Bring presser foot lever (Figure 1) down as far as word "Ricamo" (Italian for "Embroidery") on back of face plate.
8. Hold hoop and needle thread with left hand, turn balance wheel slowly toward you with right hand, and bring lower thread up through fabric in hoop.
9. While still holding both threads and hoop in left hand, bring right hand down to hoop and start machine running at medium speed. Guide hoop slowly in steady rhythm with movement of needle. This will require some practice until you become adept in following the design.

a. Special Application—Embroidered Daisies

1. Set position lever "P" in right notch (Figure 22).
2. Set zig-zag stitch lever "R" on #4 (Figure 22).
3. Drop feed dog (see General Instruction No. 7). (When feed dog is dropped, it is not necessary to set lever "R" on any particular number.)
4. To start design, lower presser foot by lowering presser foot lever, and make 3 or 4 stitches.

5. Turn balance wheel toward you until needle is in fabric on left side of stitching.
6. Raise presser foot and turn fabric counterclockwise, approximately 1/8 of an inch.
7. Lower presser foot and make 3 or 4 more stitches. Continue operation, always pivoting from the left side of the stitches.

5. MONOGRAMMING

Follow same procedure as indicated in Operating Instruction No. 4, "Embroidery with Dropped Feed."

6. APPLIQUE WORK

a. Lace Edging

To Prepare Machine

1. Set position lever "P" in center notch (Figure 22).
2. Regulate length of stitch as desired (see General Instruction No. 19).
3. Regulate width of zig-zag stitch as desired (see General Instruction No. 22).
4. Place lace edging on edge of fabric to which it is to be stitched, lower presser foot and commence sewing (see General Instruction No. 10). Make

sure that zig-zag stitch "bites" into both fabric and lace.

Note: If there is a raw edge on fabric underneath, clip it away and a finished edge will be left.

b. Raised Stitch Applique

By doing this type of work, a cord (gimp) is being covered with zig-zag stitches, as shown in Figure 23.

Fig. 23

To Prepare Machine

1. Remove zig-zag stitch hinged foot and attach zig-zag stitch cording foot to presser foot bar (see General Instruction No. 6).
2. Set position lever "P" in center notch (Figure 22).
3. Adjust zig-zag stitch lever "R" (Figure 22) on zig-zag stitch scale, according to thickness of cord being used. Heavier cord requires a wider zig-zag stitch. Use closely spaced zig-zag stitches to make a heavy covered raised stitch.

4. Pull cord (gimp) through hole at base of cording foot, from front to back, and from top to bottom of hole.
5. Commence sewing (see General Instruction No. 10).
6. Run machine slowly and follow design carefully until you have become accustomed to guiding fabric.

c. Contrast Work Applique

This type of work is essentially the same as "Raised Stitch Applique". To obtain the desired "contrast", the color of the cord (gimp) is different from the color of the needle (upper) thread.

The sewing procedure for Contrast Work is the same as for Raised Stitch Applique, with the exception that for Contrast Work the zig-zag stitches are spaced wider apart so as to obtain the pleasing contrast of the colors of cord and needle thread.

d. Cut-out Work

In doing this type of work, first baste a piece of the material on which the design (flower, etc.) is sketched or printed, to the article (garment, etc.) to which it is to be sewn. Then place both, design and article, under the presser foot and embroider (see Operating Instruction No. 4) along the outline of the design.

Having finished the embroidery work, take sharp scissors and cut away the surplus of the material as close as possible to the outline of the design. The design is thus permanently attached to the article.

7. HEMSTITCH

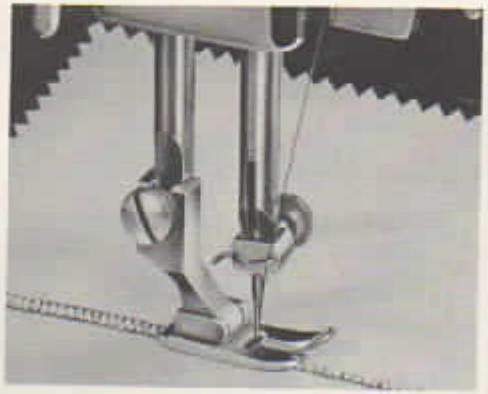


Fig. 24

To Prepare Machine

1. Set position lever "P" in center notch (Figure 22).
2. Regulate length of stitch (see General Instruction No. 19).
   Note: Successive stitches should not be too close together.
3. Regulate width of zig-zag stitch (see General Instruction No. 22).
   Note: In doing this type of work, the width of the zig-zag stitch should be rather narrow.
4. Draw desired number of threads from article to be hemstitched.
5. Place fabric under presser foot.

6. Commence sewing (see General Instruction No. 10).
   Note: Make sure that the needle "bites" close to the edge, into the space where the threads have been drawn and then into the undrawn side.
7. After stitching on one side of the drawn space has been finished, repeat same procedure on other side of space to complete hemstitching. If cut through, between parallel lines of stitches, a finished picot edge will be left.

8. OVERLOCK STITCH

To Prepare Machine

1. Set position lever "P" in center notch (Fig. 22).
2. Regulate length of stitch (see General Instruction No. 19).
3. Regulate width of zig-zag stitch (see General Instruction No. 22).
4. Place raw edge of fabric under presser foot.
5. Commence sewing (see General Instruction No. 10).

Note: Make sure that the needle "bites", close to the raw edge of the fabric, into the open space and then into the fabric itself.

Fig. 25

9. NARROW STRAIGHT STITCH HEM

To Prepare Machine

1. Remove zig-zag stitch hinged foot and attach straight stitch narrow hemmer to presser foot bar (see General Instruction No. 6). Leave hemmer foot in raised position.

Fig. 26

2. Set position lever "P" in center notch (Fig. 22).
3. Regulate length of stitch (see General Instruction No. 19).
4. Shift zig-zag stitch lever "R" to extreme left (past the zero) (Fig. 22).
5. Loosen thumb screw "Q" and move index "I" to the left, as far as zig-zag stitch lever "R".
6. Tighten thumb screw "Q", making it impossible to move zig-zag stitch lever "R".
7. Fold over edge of fabric about one-eighth of an inch, for a length of about two inches, and insert this fold beneath hemmer into scroll (Fig. 26). The spiral tongue of the hemmer turns in the edge of the fabric and forms the hem.
8. Move fabric back and forth carefully until hem forms itself in scroll.
9. Pull fabric toward you until its end is just below the needle.

10. Lower hemmer by lowering presser foot lever and commence sewing (see General Instruction No. 10). Guide and feed just enough material into hemmer foot to fill out scroll.

Caution: Do not crowd fabric into scroll and do not leave scroll only partly filled by fabric.

10. FLAT FELLED SEAMS

To Prepare Machine

1. Remove zig-zag stitch hinged foot and attach straight stitch narrow hemmer to presser foot bar (see General Instruction No. 6).

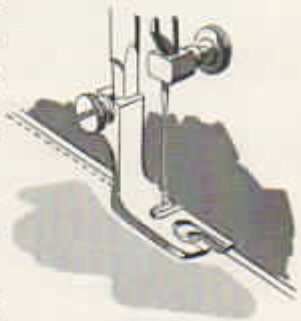


Fig. 27

2. Set position lever "P" in center notch (Fig. 22).
3. Regulate length of stitch (see General Instruction No. 19).
4. Shift zig-zag stitch lever "R" to extreme left (past the zero).
5. Loosen thumb screw "Q" and move index "I" to the left, as far as zig-zag stitch lever "R".
6. Tighten thumb screw "Q", making it impossible to move zig-zag stitch lever "R".

7. Place a piece of fabric on top of another piece so that their "right" sides face each other. Right edge of bottom piece should protrude about one-eighth of an inch beyond right edge of top piece (Fig. 27).

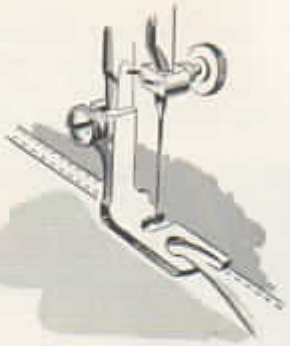


Fig. 28

8. Using straight stitch narrow hemmer as presser foot, stitch both pieces of fabric together on a line parallel to right edge of top piece of fabrics. Use edges of protruding toe of hemmer to guide edges of top and bottom pieces of fabrics Fig. 27).
9. Open and flatten out fabric on machine, "right" sides down, with edges of fabrics standing up.
10. Lift hemmer into raised position, then fold over edges of fabrics to the left and insert them into the scroll of the hemmer.
11. Lower hemmer and sew as in ordinary "Straight Stitch Hemming". Guide first row of stitches along left edge of protruding toe of hemmer (Fig. 28).

11. NARROW ROLLED EDGES

This type of work simulates "Hand Rolling".

Required

1. Zig-zag stitch needle plate.
2. Ziz-zag stitch hemmer.

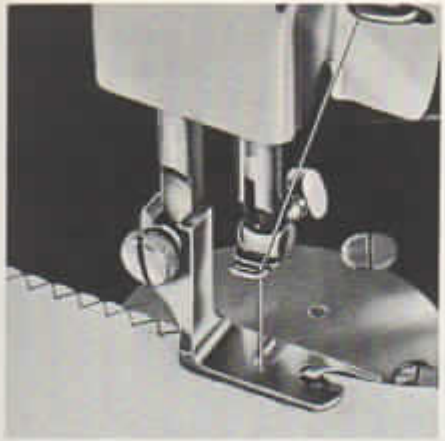


Fig. 29

To Prepare Machine

1. Fasten zig-zag stitch hemmer to presser foot bar.
2. Set position lever in right groove.
3. Regulate length of stitch between #1 and #2.
4. Set zig-zag stitch lever between #1 and #2.

To Hem

1. Insert edge to be hemmed into scroll of hemmer. *Note:* It is the spiral tongue of the hemmer that rolls the edge of the fabric and forms a hem.
2. Slip fabric through scroll until end of fabric is just below needle.
3. Lower hemmer by lowering presser foot lever and commence sewing, guiding and feeding just enough fabric into hemmer to fill half of scroll.

Caution: Do not crowd fabric into scroll.

12. HEMMING AND LACE TRIMMING

Follow same procedure as outlined in preceding Operating Instruction No. 11, "Narrow Rolled Edges", then insert lace into slot—Figure 29. By guiding hem and lace separately, the two may be applied in one operation.

13. SHELL STITCH

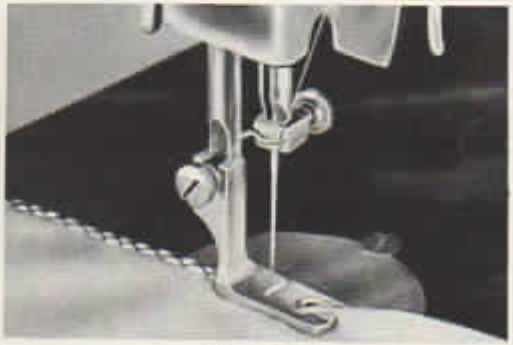


Fig. 30

This type of stitch is appropriate on silks and soft rayons only.

To make this Shell Stitch, follow same procedure as explained in Operating Instruction No. 11, page 50, "Narrow Rolled Edges", *with one exception:* Tension of upper thread must be rather tight. This will cause edge to picot and thus give the desired effect of the Shell Stitch. The width of the zig-zag stitch for this type of work should be ample and the stitches should be spaced rather widely apart.

14. QUILTING

a. Straight Stitch Quilting

To Prepare Machine

1. Attach adjustable quilting stitching guide to presser foot bar (Fig. 31).

   Note: Adjustable quilting stitching guide can be used on either right or left side of needle.

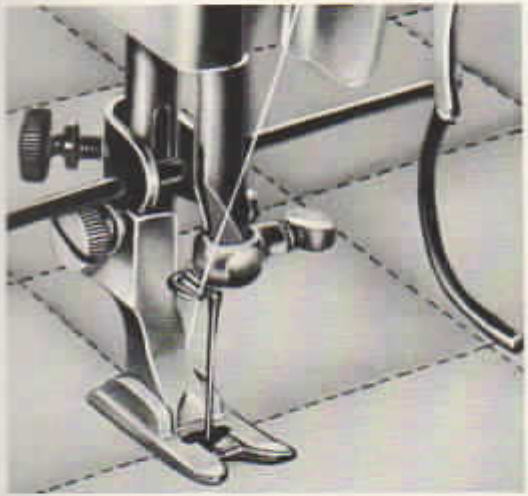


Fig. 31

2. Set position lever "P" in center notch (Fig. 22).
3. Regulate length of stitch (see General Instruction No. 19).

4. Shift zig-zag lever to extreme left (past the zero).
5. Loosen the thumb screw "Q" and move index "I" to the left, as far as zig-zag stitch lever "R".
6. Tighten thumb screw "Q", making it impossible to move zig-zag stitch lever "R".
7. Slide adjustable quilting stitching guide from left to right, or from right to left, to set to desired width.
8. After lining up needle on line to be stitched, move curved guide bar to right as far as necessary to mark desired line of parallel stitching.
9. Stitch first line (see General Instruction No. 10).
10. Move material to right, until curved guide bar is directly over first stitched line. Needle will then be directly over point where second line of stitching will be made.

b. Zig-zag Stitch Quilting

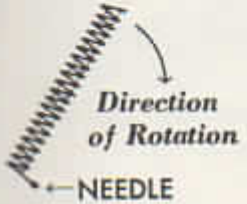
For this type of work, follow instructions 1 to 3 of preceding "Straight Stitch Quilting", then regulate the width of the zig-zag stitch (see General Instruction No. 22), and commence sewing, after having adjusted the quilting stitching guide to the desired width. Pearl cotton may also be used very effectively with the zig-zag stitch, by filling bobbin with pearl cotton, and working with the right side of material down. A tighter tension is recommended and is obtained by turning tension indicator—Figure 9—to the right, to between #6 and #9.

15. BUTTONHOLE MAKING

a. Regular "Pearl Stitch" Buttonholes

The making of a buttonhole can be easily performed in six successive steps which, for clarity, are indicated by the following explanations and illustrations:

Step No. 1—make 1st row of pearl stitches.



Step No. 2—turn fabric clockwise, using needle as a pivot.

Step No. 3—make 1st "bar tack".

Step No. 4—make 2nd row of pearl stitches.

Step No. 5—make 2nd "bar tack".
Step No. 6—make two or three straight stitches.

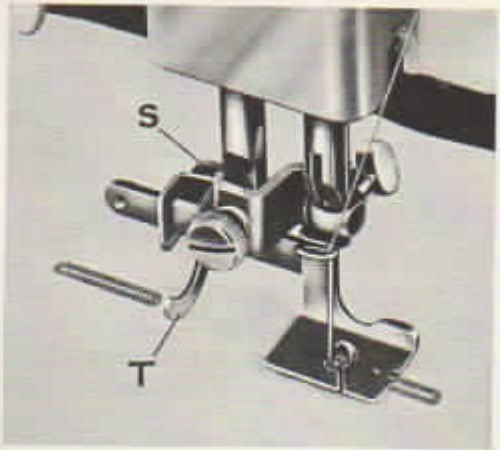


Fig. 32

To Prepare Machine

1. Remove zig-zag stitch hinged foot and attach buttonhole foot to presser foot bar (see General Instruction No. 6) (see Fig. 32).
2. Set position lever "P" in left notch (Fig. 22).
   Note: For heavy material, set position lever "P" in right notch (this will place both rows of pearl stitches somewhat farther apart).
3. Regulate length of stitch for *short* stitch (see General Instruction No. 19). This will place zig-zag stitches close together.
4. Set zig-zag stitch lever "R" between zero and #1.
5. Loosen thumb screw "Q" (Fig. 22), move guide plate "C" to right, as far as zig-zag stitch lever

"R", and, at the same time, set index guide "I" between #4 and #5.

6. Tighten thumb screw "Q".
7. Wind a bobbin (see General Instruction No. 14) and insert this full bobbin into the *black* latch bobbin case (see General Instruction No. 15). (The *black* latch bobbin case is specially adjusted for loose tension of the bobbin thread, which is required for pearl stitch buttonholes.)
8. Insert black latch bobbin case into machine (see General Instruction No. 17) and pull lower thread up through stitch hole of needle plate (see General Instruction No. 9).
9. Tighten tension of upper thread (see General Instruction No. 13) to have a strong pull. To obtain pearl stitch effect, tension of upper thread must be considerably tighter than that of lower thread.
   Note: Make a number of pearl stitches on piece of scrap material to determine proper tension of upper thread.
10. Loosen thumb screw "S" on buttonhole foot (Fig. 32) and move index "T" either forward or backward to set for desired length of buttonhole.
11. Tighten thumb screw "S".
12. Place fabric under presser foot, lower presser foot, and commence sewing (see General Instruction No. 10). Continue sewing until pearl stitch reaches index "T".

13. Turn balance wheel by hand and bring needle to the right of the pearl stitch, leaving the needle in the fabric.

    Note: When position lever "P" is in *right* notch as for heavy material, bring needle to the *left* of the pearl stitch, leaving the needle in the fabric.

14. Lift presser foot slightly and turn fabric clockwise, using needle as a pivot.

15. Lower presser foot and, by turning balance wheel toward you, bring needle up and out of fabric.

16. Move zig-zag stitch lever "R" to extreme right, as far as locked index guide "I".

17. Hold material with fingers, to prevent machine from feeding, and make 3 or 4 stitches ("bar tack").

18. Making sure that needle is up and out of fabric, move zig-zag stitch lever "R" back to left, as far as guide plate "C", and resume sewing to make the second row of pearl stitches.

    Caution: While making second row of pearl stitches, make sure to guide first row of stitches in groove provided for it on bottom face of buttonhole foot. This will space both rows of pearl stitches properly apart and prevent raw edges after the space betwen these rows of stitches has been cut open.

19. Continue sewing until second row of pearl stitches is as long as first row.

20. Turn balance wheel by hand and bring needle up and out of fabric.

21. Move zig-zag stitch lever "R" to right, as far as index guide "I".

22. Hold material with fingers, to prevent machine from feeding, and make 3 or 4 stitches, thus completing buttonhole with second "bar tack".

23. Bring zig-zag stitch lever "R" back to left, as far as guide plate "C".

24. Make 2 or 3 straight stitches to prevent "bar tack" from raveling.

25. Lift presser foot and shift fabric (away from you).

    Note: Buttonholes may also be made with zig-zag stitch hinged foot by following the same procedure explained above, with the exception of the first step.

5. Buttonhole with Cord (Gimp)

On thick soft fabric (knitted goods, etc.), where the rows of zig-zag stitches would "sink in", it is necessary to support these rows of stitches by means of a "gimp" (cord), which, in the course of making the buttonhole, is being covered with the zig-zag stitches. The procedure of making "Gimp Buttonholes" is, in general, the same as described in "Regular Pearl Stitch Buttonholes" (see page 55), with the exception, however, that the tension of the upper thread is the same as for *regular* sewing (see General Instruction No. 13) and the *bright latch* bobbin case is used in this instance.

The cord (gimp) must be inserted into the small round hole in front of the buttonhole foot, then drawn backwards through this hole, leaving a free end about 4 inches in length.

16. BUTTON SEWING

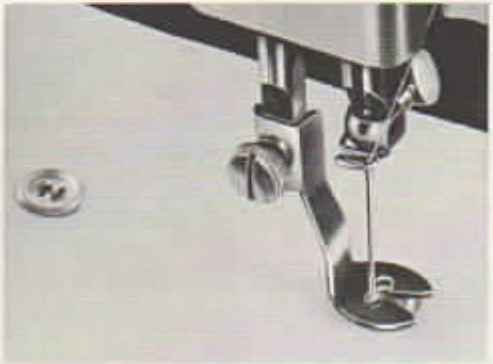


Fig. 33

a. Two-Hole Buttons

To Prepare Machine

1. Remove zig-zag stitch hinged foot and attach button sewing foot to presser foot bar (see General Instruction No. 6). Leave button sewing foot in raised position.
2. Drop feed dog (see General Instruction No. 7).
3. Set position lever "P" in left notch (Fig. 22).
4. Set zig-zag stitch lever "R" between 3 and 4 of zig-zag stitch scale.

5. While lowering the presser foot, place the button between presser foot and fabric so that the holes of the button line up in a position, as shown in Fig. 33.
6. Turn balance wheel by hand slowly toward you so that the needle goes through left hole of button. Continue turning balance wheel by hand to be certain that needle enters right hole of button properly and does not hit button. If needle does not clear button, change throw of needle by readjusting zig-zag stitch lever "R".
7. Run machine at medium speed, making about five to six stitches.
8. Bring zig-zag stitch lever "R" to extreme left, past the zero, making a few straight stitches in the same hole (to lock zig-zag stitch and thus prevent raveling).

Note: Buttons may be sewed on with the zig-zag stitch hinged foot, by following the same procedure, except for the first step.

b. Four-Hole Buttons with Parallel Stitching

1. Follow same procedure as for sewing on "Two-Hole Buttons".
2. After stitching first two holes of button, lift button sewing foot slightly and move fabric to permit stitching of remaining two holes.

c. Four-Hole Buttons with Cross-Stitching

Follow same procedure as for sewing on "Two-Hole Buttons", with the following exceptions:

1. Set zig-zag stitch lever "R" between #4 and #5 of zig-zag stitch scale.
2. After stitching first two holes (see Fig. 34), turn fabric at right angle, so that remaining two holes are in proper position under button sewing foot.
3. Proceed to stitch remaining two holes (see Fig. 34), then bring zig-zag stitch lever "R" to extreme left, past the zero, making a few straight stitches in the same hole.

Fig. 34

17. DARNING (MENDING)

To Prepare Machine

1. Remove zig-zag stitch hinged foot.
2. Remove zig-zag stitch needle plate.
3. Drop feed dog (see General Instruction No. 7).
4. Insert darning needle plate (see General Instruction No. 5).
5. Attach darning foot to presser foot bar (see General Instruction No. 6). Leave foot in raised position.
6. Set position lever "P" in center notch (Fig. 22).
7. Set zig-zag stitch lever "R" to extreme left, past the zero.
8. Use thread suitable for article to be darned.

Fig. 35

9. Place portion of fabric, to be darned, under darning foot and lower presser foot (see Fig. 35).
10. Commence sewing (see General Instruction No. 10), just outside of hole to be darned.
11. Sew across edge of hole, moving fabric gradually back and forth, until hole is filled with rows of stitches.
12. Turn fabric around at right angles, so that next rows of stitches will be made directly across those just made (see Fig. 35), and proceed until hole is completely darned.

Note: If larger holes have to be darned, it is advisable to keep the material taut, by clamping it in a "hoop". This hoop should be obtained from your local NECCHI dealer.

Darning can be done without the darning foot, by following the same procedure except for steps #2, 4 and 5.

18. MULTIPLE SLOTTED BINDER

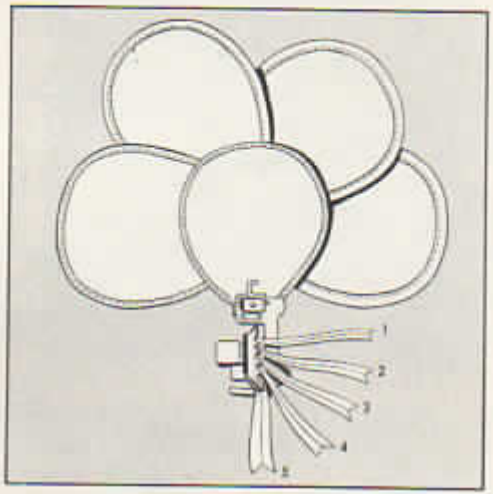


Fig. 36

To Prepare Machine

1. Remove zig-zag stitch hinged foot and attach binder to presser foot bar (see General Instruction No. 6).
2. Set position lever "P" in left notch (Fig. 22).
3. (a) If you desire straight stitch binding, shift zig-zag stitch lever "R" to extreme left, past the zero. (b) If you desire zig-zag stitch binding, move zig-zag stitch lever "R" to correspond with desired width, *but not further than* ⌀4 *on the zig-zag stitch scale*, since otherwise the needle will hit the binder and break.

4. Regulate length of stitch as desired (see General Instruction No. 19).

This MULTIPLE SLOTTED BINDER is designed for producing various widths of bound edges, and the possibilities of desirable results are practically limitless.

Five slots of varying sizes are arranged in the Binder Scroll for the purpose of carrying commercial single fold bindings of as many different widths, ranging in size from 1 to 5 inclusive.

The single fold commercial bindings must be used in the slots of the Binder and it is well to note before entering them that the widest half of fold in binding must be the lower half. The best qualities of commercial binding are thus folded to insure sufficient binding when curved edges are encountered.

The illustration (Fig. 36) indicates by size numbers the proper widths of folded bindings for use in each of the five slots as well as the variation in the widths of resultant bound edges. (The five bound circles are not intended to indicate that all five sizes of binding were done at the same time. Some combinations are possible, however.)

Select width of binding desired and clip the end to a decided point so that it can easily be drawn through the slot in Binder designed for its use. It can more easily be drawn to the needle by using a long, strong pin. Now stitch for a few inches to determine the setting of Binder at the edge of binding.

After Binder has been properly adjusted to stitch where desired, enter the material to be bound between the halves of Binder Scroll. Keep the material being

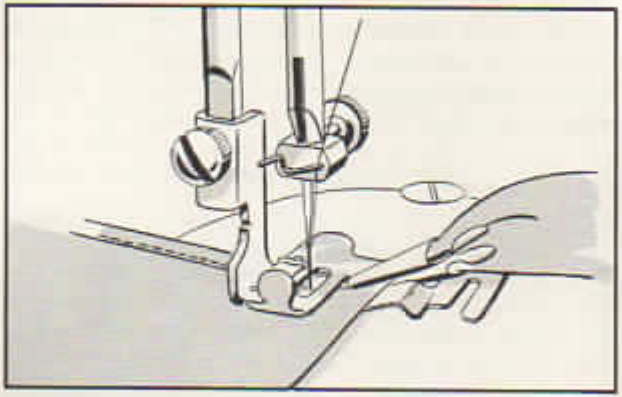


Fig. 38

gingham) binding should measure 15/16 inch wide when cut. If material is sheer and stretches easily it should be cut wider. It is a simple matter to determine correct width by experimenting (see Fig. 38).

Join binding strips by meeting the selvedge edges together or meeting the cross edges. Joining bindings thus insures a correct grain through the entire binding. Press seams and clip them off very close to stitching.

The bias material which has been prepared as described above can now be inserted in the Binder. Cut end of binding to a decided point and enter it through open mouth of Binder Scroll helping it through and to the needle by using a long strong pin.

Both upper and under edges of binding will be turned and stitched over edge of fabric (being bound) in one operation.

After Binder has been properly adjusted to stitch as close to the edge as desired, insert the material to be bound. As previously instructed, the material being bound is entered between the two halves of Binder Scroll.

Proceed with stitching and note how both upper and under edges of binding are turned in over fabric being bound. A study of Fig. 38 will give a clear understanding of this operation.

THE RUFFLER

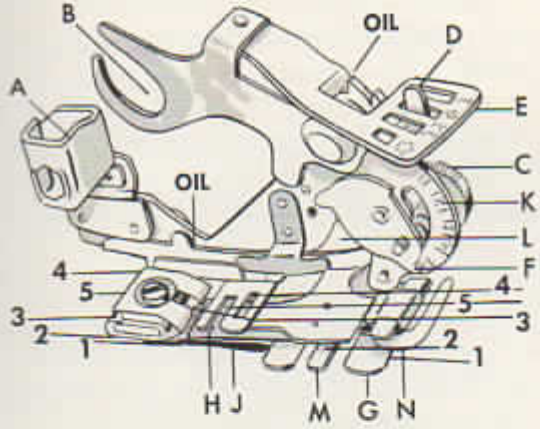


Fig. 39

The names and uses of the principal parts of the ruffler are as follows:

A—FOOT—To be attached to Presser Bar.

B—FORK ARM—To be placed astride the needle clamp.

C—ADJUSTING SCREW— To hold fullness of gathers or pleats.

D—PROJECTION—To fit through slots in Adjusting Lever.

E—ADJUSTING LEVER—To set the Ruffler for gathers or pleats.

F—POINTER—To determine size of pleat or fullness of gathers.

G—SEAM GUIDES. On Ruffler separator.

H—RUFFLING BLADE. The upper blue steel blade with teeth at end.

J—SEPARATOR. The lower blue steel blade which prevents feed blade contacting feed of machine.

K—DIAL. Numbers from 1 to 8 to aid in setting fullness of ruffle.

L—HEADING GUIDE. Can be adjusted for different size headings.

M—LIP—To separate seam guides.

N—SLIDING GUIDE. Can be adjusted for different width seams or headings.

Line 1—Is under the Ruffler and indicates the position for the garment to which ruffle is to be stitched giving a ¼ inch seam.

Line 2—Between the blue blades where the feed blade will gather or pleat material with a ¼ inch seam.

Line 3—The upper piece of material used when ruffle is enclosed between two pieces of material.

Line 4—Guide for piping strip.

Line 5—For edgestitching material to ruffle that is entered from right.

INSTRUCTIONS FOR USING

To Attach the Ruffler to the Machine

Raise the needle bar to its highest position, and remove presser foot. Place the fork arm astride the needle clamp, and at the same time attach the ruffler foot to the presser bar from the right. Tighten, using thumb screw.

To Ruffle

1. Raise the adjusting lever and move it to the left, so that the projection will enter the slot marked "1" in the adjusting lever, when the lever is released. By using plastic screw at right, dial indicator at left to number for fullness desired. The ruffling blade will then move forward and backward once every stitch.
2. Insert the material to be ruffled between the two blue blades.
3. Draw the material slightly back of needle, lower presser bar, and sew.

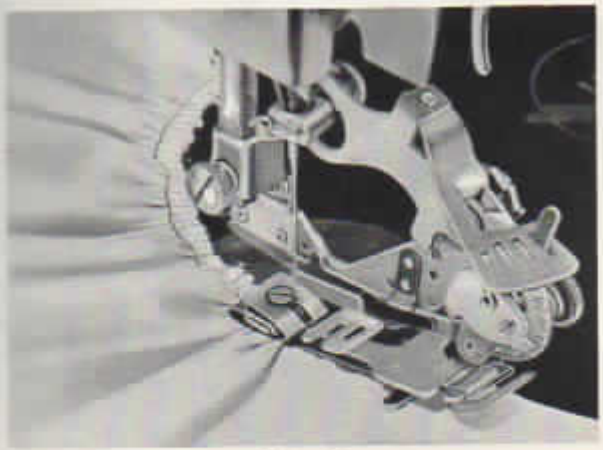


Fig. 40

To Make Ruffle and Sew to Garment in One Operation

1. Insert material to be ruffled between the two blue blades, using separator guide slots to keep ruffle heading even.
2. Place the garment to which the ruffle is to be attached under the separator blade.
3. Proceed as for gathering.

To Make a Pleat Once at Every 6 Stitches (Fig. 41)

1. Raise the adjusting lever and move it to the right, so that the projection will enter the slot marked "6" in the adjusting lever when the lever is released.
2. By using plastic screw at right, dial indicator at left to a number between "3" and "8", depending upon depth of pleat desired.

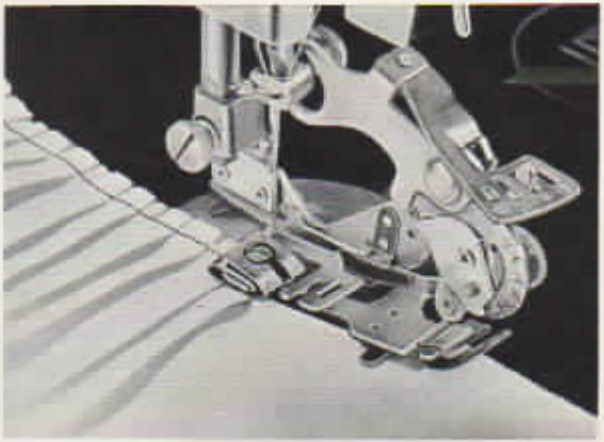


Fig. 41

3. Insert the material between the two blue blades.
4. Proceed as for ruffling.

To Make a Pleat Once at Every 12 Stitches

1. Raise the adjusting lever, so that the projection enters the slot marked "12" in the adjusting lever, when the lever is released.
2. Insert the material between the two blue blades.
3. Proceed as for ruffling.

To Do Group Pleating and Gathering

The ruffler can be adjusted for group pleating or gathering by lifting the adjusting lever and moving it to the right, so that the top of the projection enters the small slot indicated by the star on the adjusting lever. This should be done at the sections where you wish to make the space between the pleats. The ruffler will then stop and plain stitching will be made. When the desired space has been made, adjust the lever so that the projection enters either the slot marked "6" or the slot marked "12".

• • • • • •

BLINDSTITCH

(Without Attachment)

Illustrations Figs. 43 and 44 show how to fold material properly for blindstitching.

1. Set position lever "P" in right notch. (Fig. 22).
2. Set zig-zag stitch lever "R" on #4. (Fig. 22).
3. Regulate length of stitch by setting lever on #4.

4. Stitch seam binding to edge of hem in usual fashion, or on cotton materials, turn under raw edge and stitch as for regular sewing.
5. Turn up width of hem and baste (see General Instruction No. 21).
6. Turn garment wrong side out.
7. Fold under entire width of hem, "right" sides together, and allow approximately ¼ inch of seam binding to protrude beyond fold on the "wrong" side.
8. Place garment under presser foot, so that needle will catch the barest minimum of threads from the fold.
9. After material is placed properly under pressure foot, operate machine slowly and guide material straight.

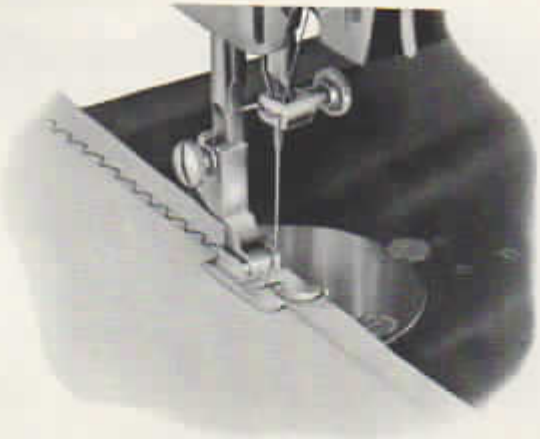


Fig. 42

HOW TO FOLD MATERIAL FOR BLINDSTITCHING

Fig. 43

Fig. 44

TUCKING ON NECCHI CUSTOM DE LUXE MACHINE WITHOUT ATTACHMENT

A. Plain Tucking:

1. From a piece of cardboard about ½" wide, make a gauge about 3½" long. (The proper length for the gauge can be determined by the width of the tucks to be made and the desired distance between the tucks.)

2. At a distance from the top of the gauge equal to twice the width of the desired tuck, cut a notch in the edge of the gauge. (Example, if the tuck is to be ¼" finished, the distance of the notch from the top of the gauge will be twice ¼" or ½".)

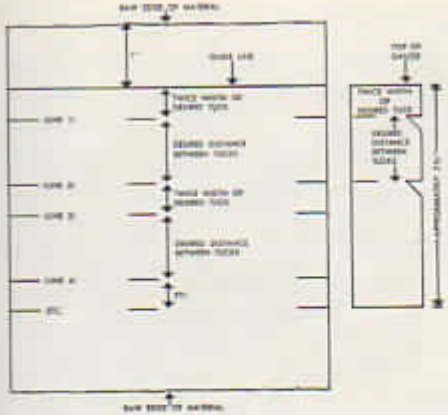
3. Below the first notch, cut a second notch at a point equal to the desired distance between the tucks.

4. Rule a guide line on the material, 1" from and parallel to the raw edge of the material. (Colored tailor's chalk on light materials and white chalk or pencil on dark materials are most suitable for these marking purposes.)

5. Place the top of the cardboard gauge on the guide line with the gauge resting flat on the material and extending below the guide line.

6. At the center of the material (right side up) where each notch appears, draw short marking lines (Lines 1 and 2 on the diagram) using the upper edges of the notches as guides. Do the same thing at the same points at both the right edge of the material and the left edge of the material. (An imaginary line drawn from the mark at the left edge through the mark at the center to the mark at the right edge will be parallel to the guide line.)

7. Slide the gauge down so that the top of the gauge is now on the second set of markings (Line 2). In that way, the two notches on the gauge will also have been moved down and will indicate the places where new markings (Lines 3 and 4) are to be made for additional tucks. Continue



this process until the material is completely marked to show the line of each desired tuck.

8. Starting from the original guide line, fold the top of the material back so that the guide line falls directly under the first set of marked lines (Line 1). This will make a tuck of the desired width.

9. Pin the material together to prevent it from slipping. Stitch along the line formed by the original guide line and the three marks. (For this stitch, set the stitch length indicator for forward sewing, between #1 and #2, the position lever in the central groove, and the zig-zag stitch lever to the extreme left past "0".)

10. After this tuck has been stitched, you are now ready to make the second tuck.

11. Bring the raw edge up so that it is again at the top of the material.

12. Now again fold the top of the material back so that Line 2 comes directly under and in back of Line 3.

13. Again, pin, stitch, etc.

14. Continue process for as many tucks as are desired.

TO USE ADJUSTABLE CLOTH STITCHING GUIDE

Fig. 45

Note: With this guide the operator is able to make the line of stitches as close to the edge of the material as desired, and to keep the stitches at uniform distance from the edge.

a. Attach cloth guide to bed of machine by means of a thumb screw which fits into one of the screw holes in the bed of the machine (Fig. 45).

b. After having adjusted cloth guide to desired distance, tighten thumb screw securely and commence sewing.

• • • • • •

List of Available Extra Attachments

(See Fig. 46)

These extra accessories are not included in the price of the machine. They will be delivered on special request only.

1. Keyhole (Round Hole) Buttonhole Set
2. Eyelet Buttonhole Attachment Set
3. Shirring Foot
4. Cording (Zipper) Foot
5. Blindstitch (Stipple or Catch Stitch) Attachment

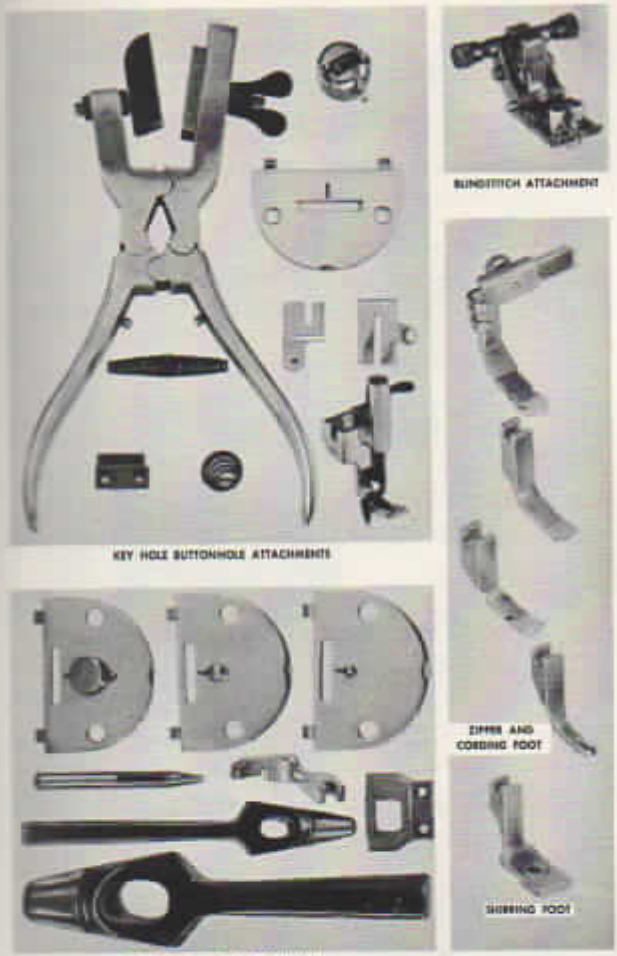


Fig. 46

SPECIAL INSTRUCTIONS FOR USING EXTRA ATTACHMENTS

1. KEYHOLE BUTTONHOLES

These are used for strictly tailored clothing.

Required

Keyhole Buttonhole Set (see Illustration, page 79). Black Latch Bobbin Case. Needle Size No. 16. Three-cord Mercerized Thread. Buttonhole Gimp (Cord).

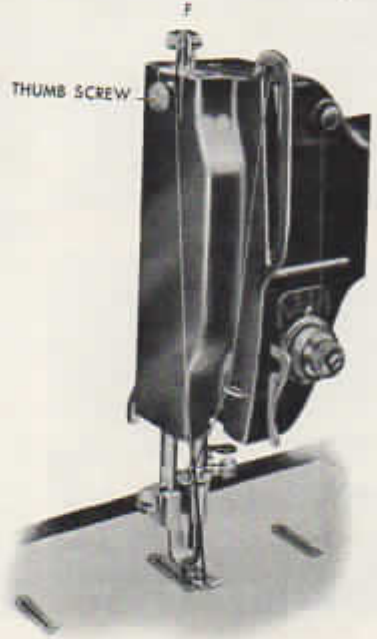


Fig. 47

To Prepare Machine

1. Remove zig-zag stitch hinged foot.
2. Remove zig-zag stitch needle plate (see General Instruction No. 5).
3. Remove feed dog by removing screws holding this feed dog.
4. Install special keyhole feed dog. Tighten screws securely so that feed dog is not loose.
5. Insert needle plate, included in Keyhole Buttonhole Set (see General Instruction No. 5).
6. Turn Tension Regulating Nut counter-clockwise until you can remove it (Fig. 1).
7. Remove Tension Spring (Fig. 1) and replace it with Tension Spring from Keyhole Buttonhole Set.
8. Replace Tension Regulating Nut and set it for tight tension.
9. Loosen thumb screw on top of face plate slightly and slip Gimp Guide "F" down, fitting it in place (Fig. 47). Tighten thumb screw securely.
10. Attach Keyhole Buttonhole Foot to presser foot bar (see General Instruction No. 6).
11. Set position lever "P" in left notch (Fig. 22).
12. Set zig-zag stitch lever "R" between #2 and #3.
13. Regulate length of stitch by setting indicator on #1 (see General Instruction No. 19).
14. Insert black latch bobbin case (see General Instruction No. 17).

15. Thread machine for regular sewing (see General Instruction No. 8).

16. Place spool of gimp on second pin "H" (Fig. 1) and pull gimp (cord) from right to left, through gimp guide "F" (Fig. 47) on face plate, then down, and, from front to back, through hole in base of presser foot.

17. Mark buttonhole on garment with tailor's chalk.

18. Take cutters (Fig. 48) and cut out the number of buttonholes needed, making sure that the round part of the cut buttonhole is about half an inch away from the edge of the garment (Fig. 49).

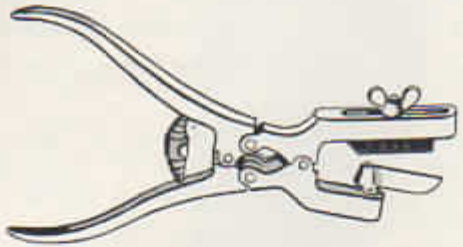


Fig. 48

19. Place garment, with the bulk of it away from you, on the machine and place buttonhole, to be sewn, underneath presser foot.

20. Lower presser foot, making sure that Spreader Guide "J" (Fig. 50) goes through cut part of buttonhole (Fig. 47).

21. Start stitching at medium speed. When you get to the round (keyhole) part of the buttonhole, help guide the fabric around and then along second side of buttonhole.

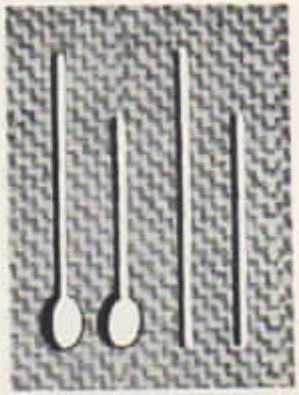


Fig. 49

22. Stitch along second side of buttonhole until you are parallel with first row of stitching, leaving needle in cloth on right side of zig-zag stitch.

23. Lift spreader guide with lever "L" (Fig. 50).

24. Lift presser foot and, with needle still in cloth, turn garment counterclockwise.

25. Make "bar tack" by stitching across the straight end of the buttonhole. Clip gimp very close to buttonhole and make two or three very close straight stitches to prevent bar tack from raveling.

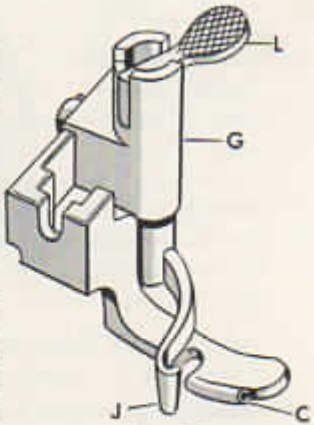


Fig. 50

2. EYELET BUTTONHOLES

Required

Eyelet Buttonhole Attachment Set.

To Prepare Machine

1. Remove zig-zag stitch hinged foot from presser foot bar.
2. Remove zig-zag stitch needle plate (see General Instruction No. 5).
3. Remove feed dog by removing screws holding this feed dog.
4. Install special keyhole feed dog. Tighten screws securely so that feed dog is not loose.
5. Insert any one of the three needle plates (Fig. 51), included in the Eyelet Buttonhole Attachment Set, according to the size of eyelet to be made (see General Instruction No. 5).

Fig. 51

6. Attach Eyelet Buttonhole foot to presser foot bar. Leave foot in raised position.
7. Thread and adjust machine for regular zig-zag stitching (see General Instruction No. 2).

Fig. 52

8. Regulate length of stitch for very short stitch (see General Instruction No. 19).
   Note: Length of stitch can be adjusted to suit individual requirement.
9. Set position lever "P" in center notch (Fig. 22).
10. Set zig-zag stitch lever "R" between #2 and #3. (Fig. 22)
11. With tailors' chalk, mark location of eyelets on garment.
12. Take one of the three eyelet punches (Fig. 52)—according to desired size of eyelet—place it on garment over tailors' chalk mark and hit with heavy object to cut through cloth.
13. Place perforated portion of cloth over raised portion of eyelet needle plate.
14. Bring foot down and commence sewing (see General Instruction No. 10).
    Notes: Cloth will *automatically* be fed clockwise. If cloth should stick, help by guiding it around. Stitching may be gone over as many times as required until desired effect is obtained.

3. SHIRRING (Gathering)

To Prepare Machine

1. Remove zig-zag stitch hinged foot from presser foot bar.

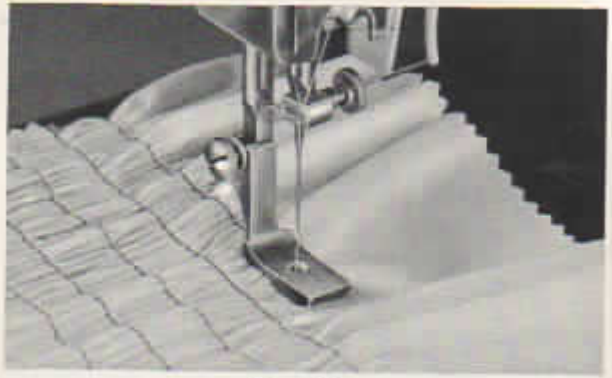


Fig. 53

2. Attach Shirring Foot (Gatherer) to presser foot bar.
3. Regulate length of stitch (see General Instruction No. 19).
   Note: The fullness of the gathers will be increased by using a very long stitch and a tighter tension of the needle thread.
4. Set position lever "P" in center notch (Fig. 22).
5. Shift zig-zag stitch lever "R" to extreme left, past the zero.
6. Loosen thumb screw "Q" and move index "I" to the left as far as lever "R".
7. Tighten thumb screw "Q", making it impossible to move lever "R".
8. Commence sewing (see General Instruction No. 10), after having placed fabric underneath foot (Fig. 53).

4. CORDING (ZIPPER) OPERATIONS

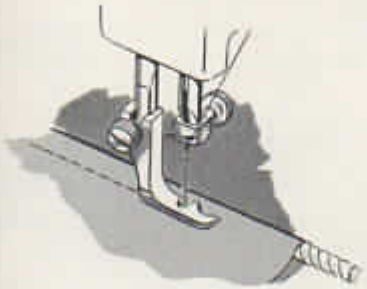


Fig. 54

To Prepare Machine

1. Remove zig-zag stitch hinged foot from presser foot bar.
2. Attach Cording Foot to presser foot bar.
3. Regulate length of stitch (see Gen. Instr. No. 19).
4. Set position lever "P" in center notch (Fig. 22).
5. Shift zig-zag stitch lever "R" to extreme left, past the zero.
6. Loosen thumb screw "Q" and move index "I" to the left as far as lever "R".
7. Tighten thumb screw "Q", making impossible to move lever "R".
8. Commence sewing (see Gen. Instr. No. 10), after

having placed fabric and cord underneath foot (Fig. 54).

Note: The cording foot is very useful for slip cover work (sewing on cords) and for attaching zippers to garments, etc.

5. BLIND STITCHING

The NECCHI Blind Stitch Attachment is a new, improved special presser foot, used for sewing invisible hems into garments.

To Prepare Machine

1. Remove zig-zag stitch presser foot and also screw which held it to presser foot bar.
2. Attach Blind Stitch Attachment Foot to presser foot bar, using small screw which is furnished with this attachment.
3. Use fine thread on machine and insert fine needle into needle bar.

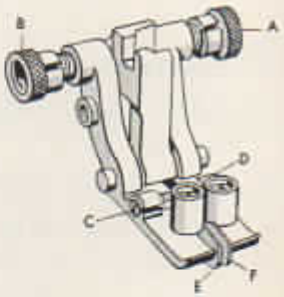


Fig. 55

4. Set stitch length regulator to #4 (see General Instruction No. 19).
5. Set position lever "P" in left notch (Fig. 22).
6. Set zig-zag stitch lever "R" on #4.

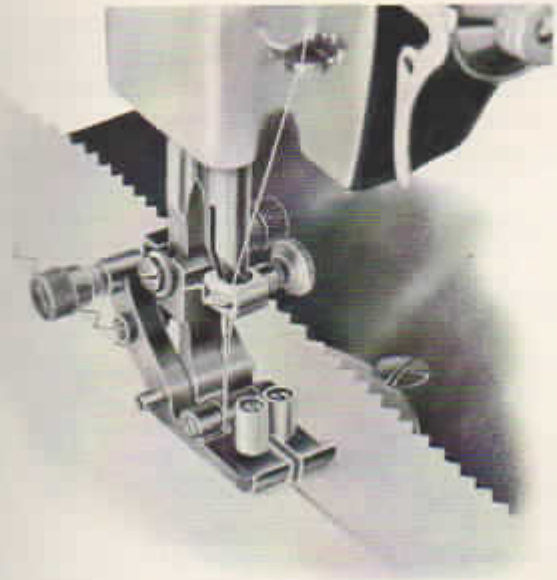


Fig. 56

7. Mark hem on fabric (garment) and trim evenly.
8. Stitch seam binding to edge of hem in usual fashion, or on cotton materials, turn under raw edge and stitch as for regular sewing.
9. Turn hem on hem line and baste. (See Fig. 56).

Note: The basting can be done by machine, by setting the machine on a loose tension and a long stitch.

10. Turn garment wrong side out. Fold under entire width of hem, right sides together, and allow approximately ¼ inch of seam binding to protrude beyond fold on the wrong side.

11. If work is to be handled from the left side of the attachment, place material under the left hand presser foot, so that the fold is resting against guide wing "E" (Fig. 55). Lower presser foot bar, and operate machine by hand, to see whether needle pierces every edge of fold. If needle does not pierce fold, turn knurled knob "B" to the back (away from you), thus bringing left hand presser foot within range of needle.
If needle catches too much of the fold, turn knurled knob "B" forward (toward you), thus bringing left hand presser foot and wing guide away from the needle.

12. After having set attachment, proceed to sew with #4 zig-zag stitch, and guide edge of fold against guide wing "E" (Fig. 55).

Note: If work is to be done from the right side of the attachment, follow same procedure, and use screws "A", "B", and wing guide "F" (Fig. 55).

Note: To "blind hem" rayons, silks, and other fine materials, it is recommended that tissue paper be used under material. After wing guide is set, turn screw "C" (Fig. 55) toward the needle to act as needle guide and to prevent needle from deflecting and piercing too much of the fold.

For best results in your home sewing with nylon follow these suggestions:

When cutting nylon fabric, use well sharpened shears. Leave generous allowance for seams.

Needles, Pins, Basting: Needles, for both machine and hand sewing, should be small and sharp. Select the finest needle that will accommodate the thread. Numbers 11 and 00 or their equivalents are best for most nylon fabrics. Sharply pointed pins and sharp, fine needles penetrate tough nylon easier and give better results in basting.

THREAD: Nylon thread is recommended for nylon fabrics. Seams sewn with nylon thread are durable, dry quickly when washed, and will not shrink. Other threads, however, may be used.

Always cut nylon thread with scissors rather than attempting to break it by hand. This will avoid "pulled" seams, and give a clean-cut end that is easier to put through the eye of the needle.

TESTING: It is very important to test your stitching on all nylon fabrics before starting any permanent seams. This will help you determine the proper sewing machine settings.

Stitching: Fewer stitches per inch can be made when sewing nylon. Better seams will generally result when stitches are larger than those used on other fabrics. If you prefer smaller stitches for top stitching, your own experimentation on the fabric itself will help you select the proper machine adjustments.

When sewing on tightly woven fabrics as few as seven stitches to an inch may be used, particularly for inside seams. Nylon's strength allows this large stitch to be possible.

Tensions: Test stitch on the straight of the goods, lowering tensions until a well-formed but loose stitch is made.

Because of nylon's great strength and elasticity, sewing with tensions normally used with other threads may cause seams sewn with nylon thread to pucker. When sewing with threads other than nylon, use loose tensions and large stitches, too.

The use of tissue or ordinary shelf paper under your material often gives smoother seams when sewing sheer and tightly woven fabrics.

FINISHING: Seams on nylon fabrics, as on all fine fabrics, should be carefully made without raw edges. Bound, French, edge-stitched, or overcast seams help assure resistance to raveling. Pinking the edges will be sufficient for some tightly woven fabrics. Your decision on finishing should be based on whether or not your particular fabric tends to ravel. Most nylon tricot fabrics will not ravel. Finishing without raw edges is not as necessary on these as it is on some other fabrics.

When finishing seams with bindings, be sure they are nylon or of preshrunk material. Well finished seams will help preserve the beauty and durability of nylon articles.

Fasten stitches at the beginning and end of each seam by retracing for several stitches or tying thread ends.

PRESSING: As with other fabrics, each seam should be pressed after stitching. It is important to use a low temperature—the "nylon" or "rayon" setting on automatic irons. Pressing with a damp cloth may give superior results or, if you have a steam iron, it too may be used.